

a 3

2.(amended) An override device as defined in Claim 1, wherein said first and second drive means comprise [comprising] respectively first and second gears [disposed in a parallel relationship], said second gear being connected to the output shaft for rotation therewith, said actuating means being adapted to displace said first gear relative to said second gear between first and second positions, wherein said first and second gears are in meshed engagement only in said second position, said displacement in translation of said first gear first operating said power cut-off means and then, once in said [in] meshed engagement, operating said disengagement means respectively for interrupting power to the motor and for allowing said second gear to drive the output shaft while the motor is non operational.

3.(amended) An override device as defined in Claim 2, wherein said actuating means comprise[s a] chain means engaged on [a] pulley means, [a] cam means abutting said pulley means and adapted upon initial rotation of said pulley means to axially displace said first gear for said displacement in translation from said first position towards said second position in engagement with said second gear, wherein further rotation of said pulley means with said first gear in said second position causes the rotation of said first gear and thus of said second gear and of the output shaft.

REMARKS

Claims 1 to 3 remain in the application.

With respect to item 2 at page 2 of the aforementioned Official Action, Applicant does not recognize to what the Examiner is referring when he mentions "supposed errors". In any event, Applicant has herein amended Claim 2

in order that it is generic to the two species of Figs. 1 to 5 and of Figs. 6 to 9. Furthermore, claim 3 is now also believed to be generic to both species. It must be noted that the two embodiments, i.e. possible species, of the present Application do not differ significantly, at least not in their basic features, function and interrelation between components and function. Indeed, Figs. 1 to 5 differ from Figs. 6 to 9 by having parallel rotational axes for both the chain pulley 36 and the output motor 10, whereas in Figs. 6 to 9 the pulley 36' has its rotational axis extending at right angles to the output shaft 10'. Consequently, the first embodiment of Figs. 1 to 5 comprises straight gears 20 and 74 which are parallel, with the gears 20' and 74' of the second embodiment of Figs. 6 to 9 being of the bevel type and extending perpendicularly to one another.

Regarding items 4 and 5 of page 2 of the Official Action, Applicant has removed from the Claim 1 the reference to the "apparatus" which, by the way, was intended to make reference to a door, or the like, operated by the output shaft, and not to the override device which is described and illustrated in details in the Application. As to the claimed "manual actuating means", it is believed to clearly refer to the chain 38 (and its pulley 36), and reference is made to the second paragraph of page 7 of the Disclosure. Turning to item 5, the reference to the "apparatus" has again been removed from the claims, and it appears clear that the chain 38 constitutes the single actuating mechanism mentioned at line 14 of page 7 and to its corresponding "manual actuating means" of Claim 1 as, when the chain 38 is manually operated (e.g. pulled), it automatically causes the power to be cut off from the motor, the disengagement of the motor from the output shaft which it normally drives, and

the engagement of the drive gears 20 and 74 which allow the movement of the chain to rotate the output shaft without the motor, whereby the chain manually actuates the mechanism which allows it to manually drive the output shaft. The chain hoist is a typical manual actuating mechanism and it is specifically referred to by reference numeral 38 at page 7, line 7 and in the Drawings. If required by the Examiner, Applicants can remove the term "hoist" from line 15 of page 46.

Now turning to items 6 and 7 of page 3 of the Official Action, the Patent Office is advised that Applicants intend to submit an inventors' Supplemental Declaration at the end of the prosecution of the present Application such as to identify this Application by its Serial Number and Filing Date and to complete the identification of the priority Application; in the meantime, the Office is advised that the priority Canadian Application filed on December 23, 1993 bears Serial Number 2,112,350. In spite of the foregoing, if it is required that an inventors' Declaration be submitted before allowance of the Application, the Office is respectfully requested to advise Applicants.

Applicants believe to have responded to item 8 of page 3 of the Official Action in the above discussion with respect to item 5.

As to item 9 at page 3 of the Official Action, Applicants have corrected clerical errors at pages 8 and 10 of the Disclosure and at line 2 of original Claim 2.

With regards to item 10 at pages 3 and 4 of the Official Action, it is believed that it is clear that the claimed "actuating means" refers to the "manual actuating means" at the beginning of Claim 1 (as being the only previously claimed "actuating means") and support therefor

appears at lines 7 and 8 of page 7; nevertheless, Applicants have amended page 7 to clarify this and support is provided at page 6, lines 14 and 15, in the Drawings and in the overall description of the invention. The component "output shaft" recited in the claims is found identically in the description in the form of the output shaft 10 (see line 20 of page 6). Applicants have amended page 10 of the Disclosure in order to identify the main components belonging to first and second drive mechanisms, the latter corresponding to the claimed "first drive means" and "second drive means". The claimed "power cut-off means" can be easily construed as corresponding in the preferred embodiment to the switch 68, and the Examiner is directed to page 9, lines 23 to 28 of the Disclosure. The claimed "disengagement means" can be easily construed, especially with the claimed function associated thereto, to correspond in the preferred embodiment to the lever mechanism 72, and the Examiner is directed to page 8, lines 9 to 15, and to page 9, lines 29 to 32 of the Disclosure.

As the rejection under 37 U.S.C. §112, Applicant considers that it is clear that the claims are directed to an override device for use with a motor which normally drives an output shaft and which is adapted, when manually operated, to manually drive the output shaft. The motor and the output shaft are part of the preamble of Claim 1 and represent the environment of the positively claimed override device. Again, the reference to the "apparatus" in the claims has been removed. In view of the amendments which have herein been made to the Disclosure and the above argumentation, it is now believed that the Specification provides proper antecedent basis for the claimed subject matter without having added new subject matter to the Application.

Now turning to the rejection of the Claims under 37 U.S.C. §102 based on Stefanatos' Canadian Patent No. 1,165,785, Applicant has the following comments which must be excogitated while taking into consideration the changes made herein to the claims.

Canadian Patent 1,165,785 discloses an override device to permit manual operation of a closure normally driven by a motor. This override device comprises a sprocket 32 driven by a chain 33 and a safety interlock switch 43 adapted to disconnect power to the electric motor 11. The system may also comprises a manual release lever 31 to allow the brake 27 to be released when it is necessary to operate the door operator manually. This Canadian Patent also discloses that the safety interlock switch 43 has a linkage (not shown) to the brake release lever 31 so that if the door operator is manually operated the safety interlock switch 43 is moved to the "off" position. Furthermore, Stefanatos adds that, when the closure is operated by the chain 33, the manual release lever 31 for the brake is activated and the safety interlock switch 43 simultaneously disconnects power to the motor, although this is not illustrated. An aspect which is not described in Stefanatos is how the override device is connected to the output shaft 21 and thus how it is disconnected therefrom when the closure is operated by the motor. As best understood, during typical operation of the motor, the chain and the sprocket will also rotate. The necessity of releasing the brake 27 when the door operator is manually operated suggests that the use of the actuating means (i.e. chain 33) in Stefanatos causes the rotation of the shafts 18 and 14 and of the motor shaft 12. Canadian Patent 1,165,785 does not teach to disengage the motor from the output shaft during manual operation of the closure.

In Stefanatos, the output shaft should be shaft 21 (and not 12 which is a V-belt pulley mounted on the motor shaft) and it is normally driven by the motor, as the motor shaft is not the output shaft described in the present Specification (see lines 11 to 15, page 8), the output shaft being rather the shaft coupled to the closure and which can still be driven in the manual mode. In Stefanatos, it is irrelevant that the shaft 12 rotates during the manual mode. In other words, the claimed output shaft is the output shaft of the overall door operating device, not the motor shaft. When the door operating device is manually operated, the rotation of the motor shaft in Stefanatos results from the fact that the output shaft 21 is still connected via the chain 19 to the shaft 18 which is coupled to the motor shaft 12 by the intermediate shaft 14, whereby the rotation of the motor shaft 12 does not contribute to open or close the door but is rather appears to constitute an obstacle to it.

Applicants do not consider that the intermediate sprocket 17 can be viewed as the claimed first drive means as, since when the manual actuating means 33 is activated, it causes the rotation of the output shaft 21 which is still connected via the chain 19 to the shaft 18 on which the sprocket 17 is mounted, the sprocket 17 does not have a driving function as does the first drive means of Claim 1. Furthermore, the sprocket 17 is not adapted to drive a second drive means which is coupled to the output shaft 21 when the device is manually operated. We believe that the only component which could be considered as a first drive means is the chain sprocket 32. It is noted that the first and second drive means defined in our specification are only functional when the closure is operated by the override device which is not the case for the sprocket 17 and the shaft 14 in Stefanatos.

We do not agree that the intermediate shaft 14 could be considered as the second means for the same reasons set above. The intermediate shaft 14 does not drive the output shaft 21 when the closure is operated by the override device. The intermediate shaft is in function when the closure is operated by the electric motor 11.

To summarize, when compared to present Claim 1, Stefanatos does not teach an override device provided with two drive means which are only operated during manual mode, that is when the override device is operating the output shaft, that is which are not functional when the closure is operated by the motor and are thus only functional during manual operation. In Stefanatos, the drive mechanisms which one might want to compare to those of Claim 1 are also functional when the closure is operated by the motor.

In view of the changes made herein to the Application and in view of the above argumentation, Applicants request that the Examiner reconsiders his grounds of rejection. Also, as it is believed that Claims 1 to 3 are generic and that Claim 1 is patentable, Claim 3 should be brought back into the present application and allowed with Claims 1 and 2.

In view of the foregoing, examination of the amended claims is respectfully requested and, as indicated hereinabove, present independent Claim 1 is believed to be patentable as the features and/or combinations defined therein are not disclosed nor even suggested in any of the cited references. Allowance of the remaining dependent claims is now also anticipated. Claims 1 to 3 as herein amended are again considered to be generic to both embodiments of the present Application.

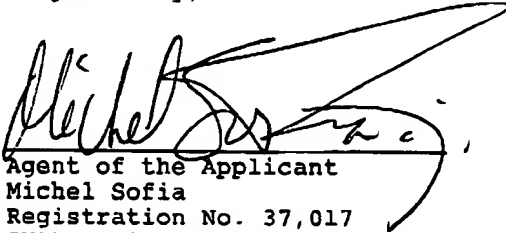
Reconsideration of the invention as claimed in the light of the above amendments and of the above comments is

thus respectfully requested. If the Examiner feels that further changes to the application are necessary or if he is not convinced of the patentability of the Claims on file, Applicant respectfully requests a telephone interview with the undersigned Agent of Record to advance the prosecution of the present application as patentable subject matter is evident, and has already been indicated, and to avoid unnecessary expenses to Applicant.

Respectfully,

December 16, 1996

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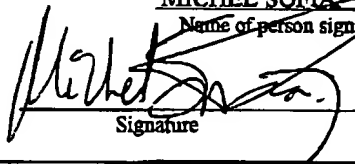

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